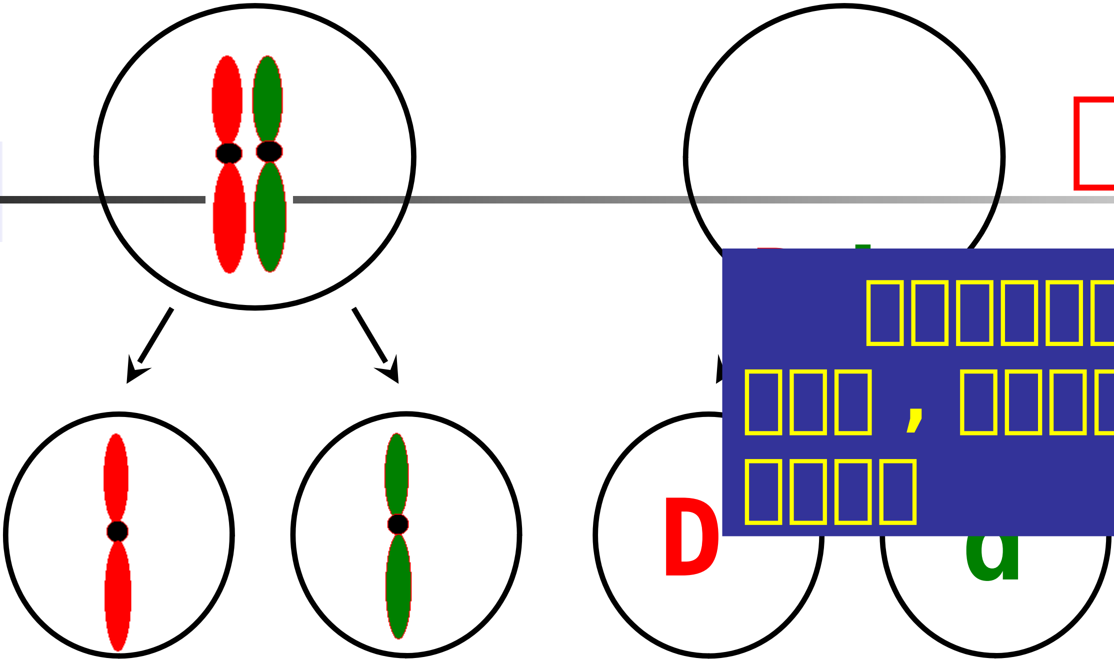
[illegible] [illegible]

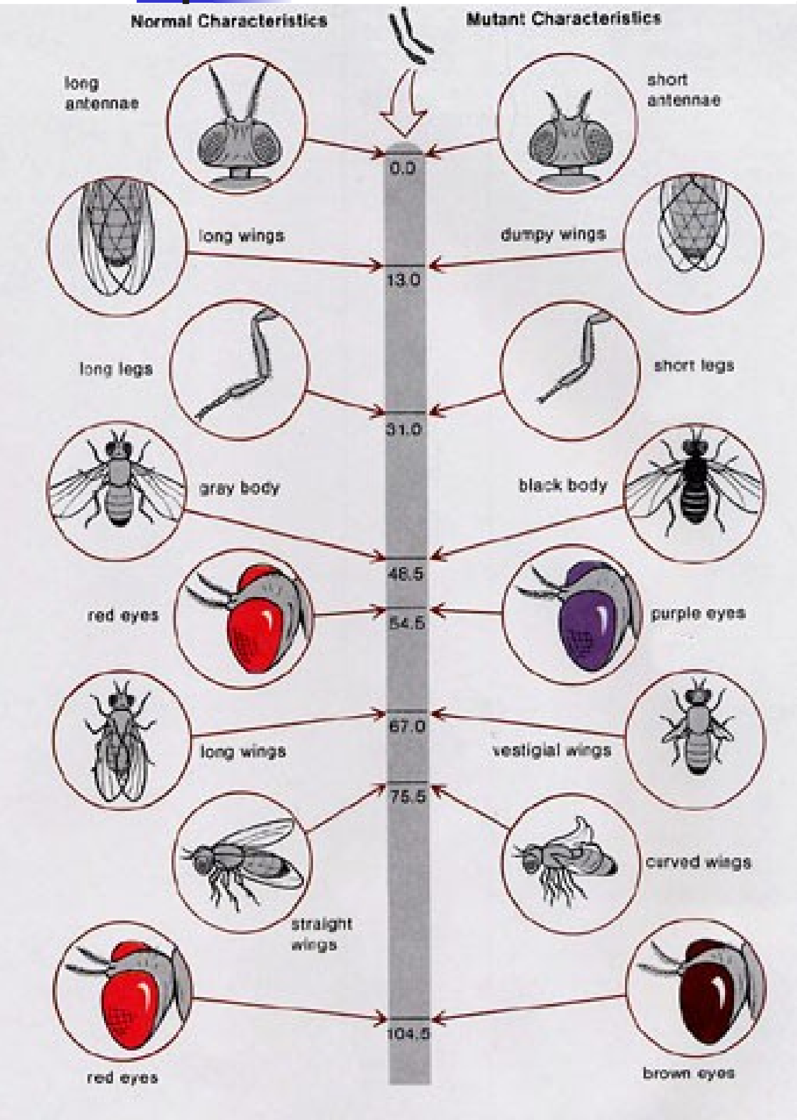
- [illegible] **2** [illegible] [illegible]

	[illegible]	[illegible]
[illegible]	[illegible] [illegible]	[illegible] [illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]


D
d

[illegible]

[illegible] [illegible] 3~4mm [illegible]
[illegible]



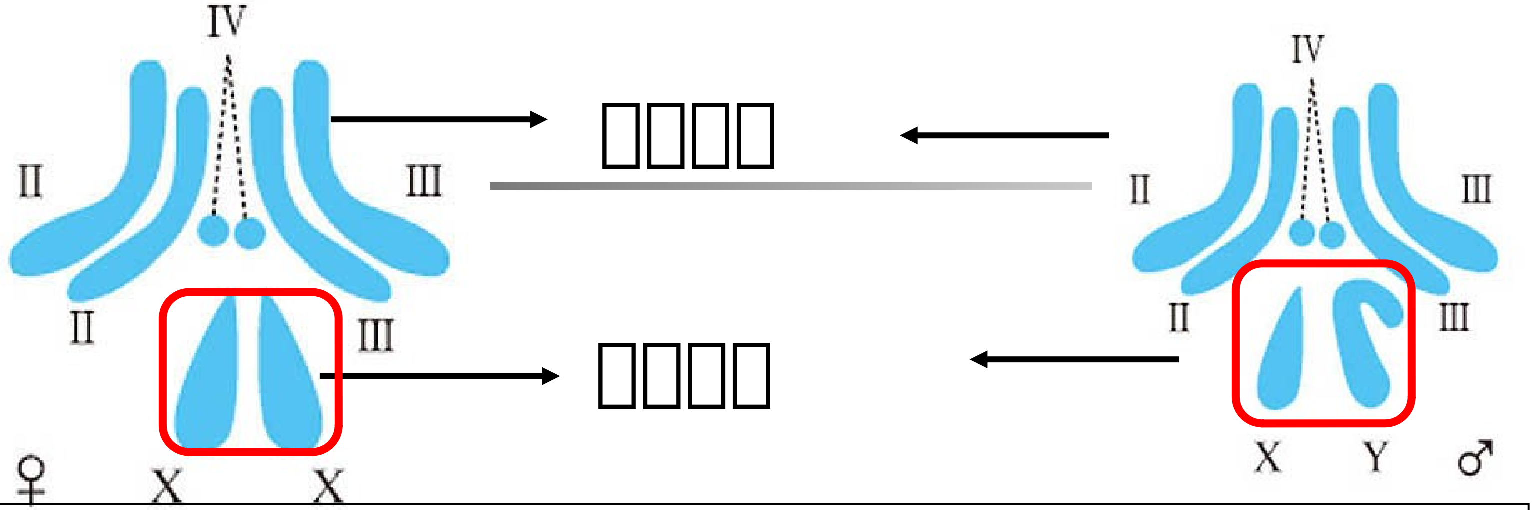
Normal Characteristics
Mutant Characteristics
long antennae
short antennae
0.0
long wings
dumpy wings
13.0
long legs
short legs
31.0
gray body
black body
48.5
red eyes
purple eyes
54.5
long wings
vestigial wings
67.0
straight wings
curved wings
75.5
red eyes
brown eyes
104.5

[illegible]

1 [illegible]

2 [illegible]

3 [illegible]



□□□4□□□□□□□3□□□□□□□1□□□□□□□□□♀□XX□□□♂□XY□□□

□□□□□□□□□□□□□□□□

6+XY□3□+XY

□□□□□□□□□□□□□□□□

6+XX□3□+XX

□□ XX × XY

□ □

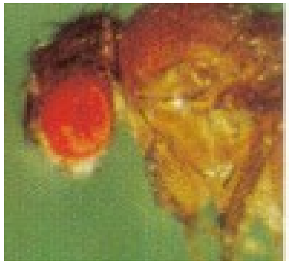
□□ X X Y

□□ XX□□□ XY□□□

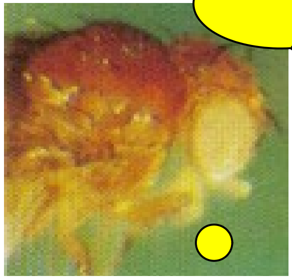
1. [illegible]

[illegible] F2 [illegible]
[illegible]

P ♀



×



♂

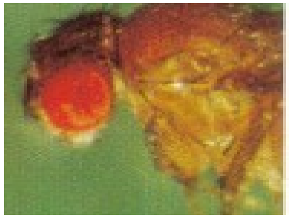
[illegible]

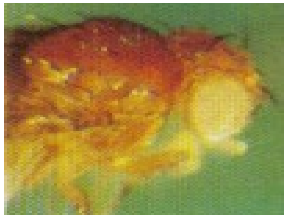
F_1

[illegible]
[illegible]

F_1 [illegible]

F_2



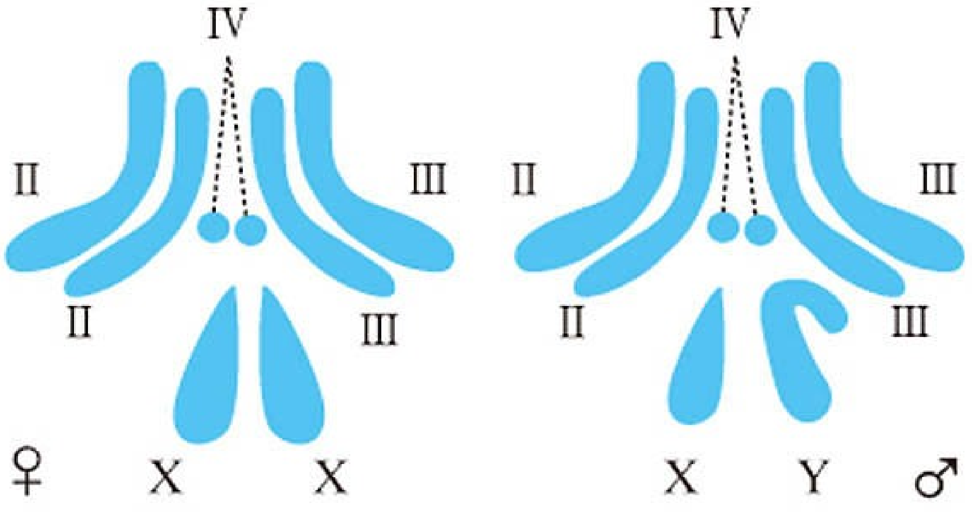


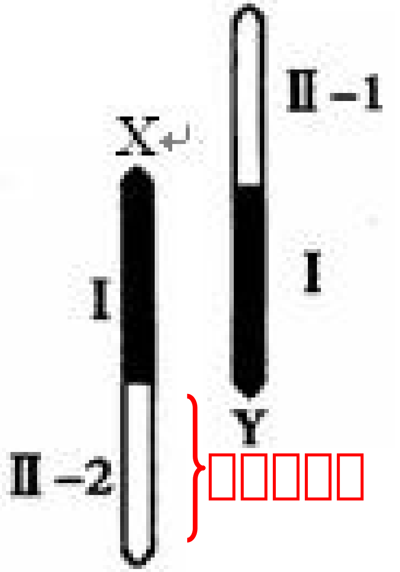
3 [illegible] 1 [illegible]
[illegible]

[illegible]
3

[illegible] [illegible]
1

2. [illegible]





[illegible]1 [illegible]

[illegible]2 [illegible]

WW([illegible]　ww [illegible]

[illegible] X (Ⅱ-2) [illegible]

Y [illegible]

X^WX^W　X^wY

2. [illegible]

[illegible] X [illegible]

[illegible] [illegible]

P [illegible] X^WX^W × X^wY

F_1 [illegible] X^WX^w X^WY

[illegible] [illegible] [illegible]

F_2 [illegible] X^WX^W X^WX^w

[illegible] [illegible]

X^WY 3:1 X^wY

[illegible] [illegible]

3. [illegible]

[illegible]

[illegible] F1 [illegible]

F1

$X^W X^w$ [illegible]	×	X^wY [illegible]
$X^W Y$ [illegible]	×	$X^w X^w$ [illegible]

3. [illegible]

F1 [illegible]

[illegible]　　[illegible]

P [illegible] $X^W X^w$ × $X^w Y$

F_1 [illegible] $X^W X^w$　　$X^W Y$

[illegible]　[illegible]

$X^w X^w$　　$X^w Y$

[illegible]　　[illegible]

[illegible]

F1 [illegible]

[illegible]　　[illegible]

P [illegible] $X^W Y$ × $X^w X^w$

F_1 [illegible] $X^W X^w$　　$X^w Y$

[illegible] 1:1 [illegible]

4. [illegible]

[illegible] **F1** [illegible]

[illegible] **X** [illegible]

5. [illegible]

↓

[illegible]

[illegible]
[illegible]—[illegible]

[illegible] **F2** [illegible] **:** [illegible] **=3:1** [illegible]

→[illegible] [illegible]

→[illegible] [illegible] **X** [illegible] **Y** [illegible]

→[illegible]

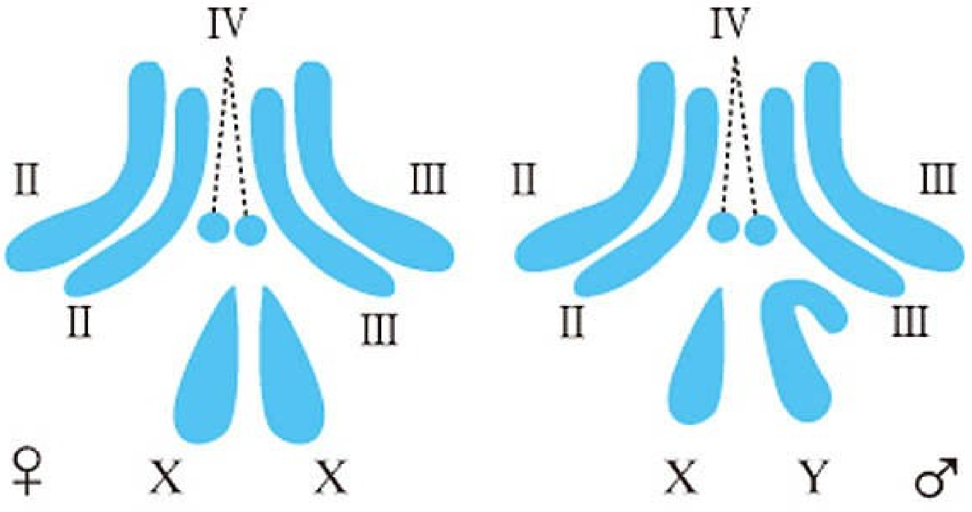
→[illegible] [illegible]

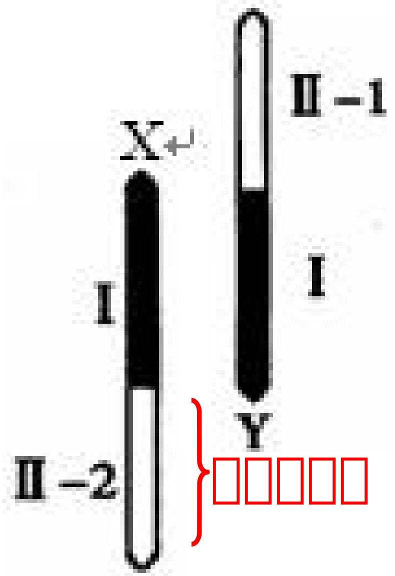
→[illegible] [illegible]

[illegible] **X** [illegible] **Y** [illegible]

[illegible]

2. [illegible]





[illegible]1[illegible] WW([illegible] ww [illegible]

[illegible]2[illegible]

[illegible] Y(Ⅱ-1) [illegible] XX([illegible] XY^w [illegible]

[illegible] X [illegible] Y(Ⅰ) [illegible] X^WX^W X^wY^w

[illegible] X （Ⅱ-2) [illegible] X^WX^W X^wY

2.1 [illegible]

[illegible] X [illegible] Y [illegible] | **[illegible] X [illegible]**

[illegible] [illegible]

P [illegible] X^WX^W × X^wY^w

F_1 [illegible] X^WX^w X^WY^w

[illegible] [illegible] [illegible]

F_2 [illegible] X^WX^W X^WX^w

[illegible] [illegible]

X^WY^w **3:1** X^wY^w

[illegible] [illegible]

[illegible] [illegible]

P [illegible] X^WX^W × X^wY

F_1 [illegible] X^WX^w

[illegible] [illegible]

F_2 [illegible] X^WX^W X^WX^w

[illegible] [illegible]

X^WY **3:1** X^wY

[illegible] [illegible]

[illegible]
[illegible] Y [illegible]

[illegible] B [illegible] (b) [illegible]

[illegible]

X [illegible]

[illegible]

[illegible] X [illegible]

[illegible]

[illegible]

[illegible]

□□□□□□□X□□□□□□□□□□□□

□□□□×□□□□□□

aa x AA→ Aa

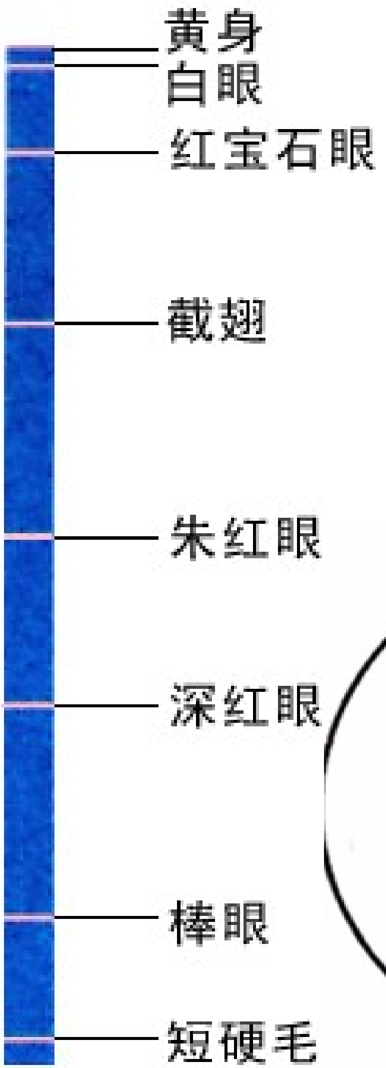
□□□□□□□□□□□

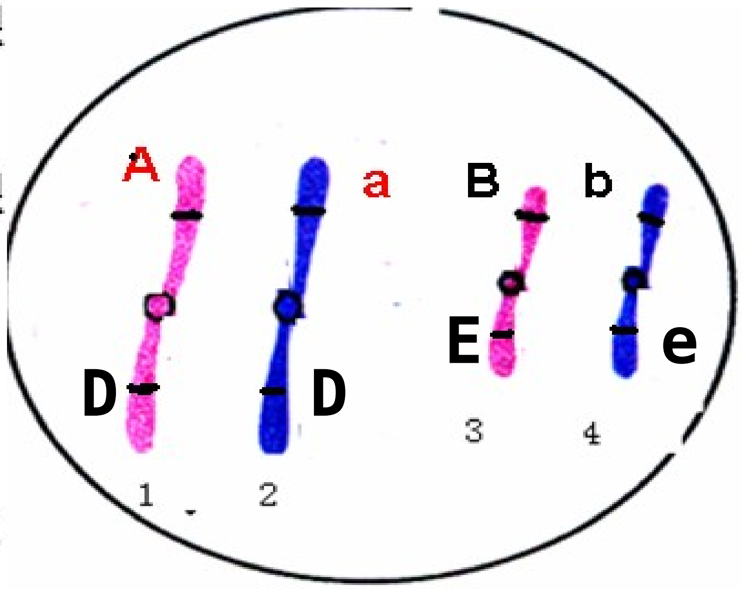
X^aX^a x X^AY^A→ X^AX^a □ X^aY^A

□□□□□□□□□□□

X^aX^a x X^AY→ X^AX^a □ X^aY

□□□□□□□


黄身
白眼
红宝石眼
截翅
朱红眼
深红眼
棒眼
短硬毛


A
a
B
b
D
D
E
e
1
2
3
4

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

X

X

√

√

X

[illegible]

C

①1866 [illegible]

②1903 [illegible] "[illegible]"

③ [illegible]

A.① [illegible]—[illegible]②[illegible]—[illegible]③[illegible]

B.① [illegible]②[illegible]③[illegible]

C.① [illegible]②[illegible]③[illegible]—[illegible]

D.① [illegible]②[illegible]—[illegible]③[illegible]

[illegible]

[illegible] X [illegible]

B

A. [illegible] F1 [illegible] 1 [illegible] 1

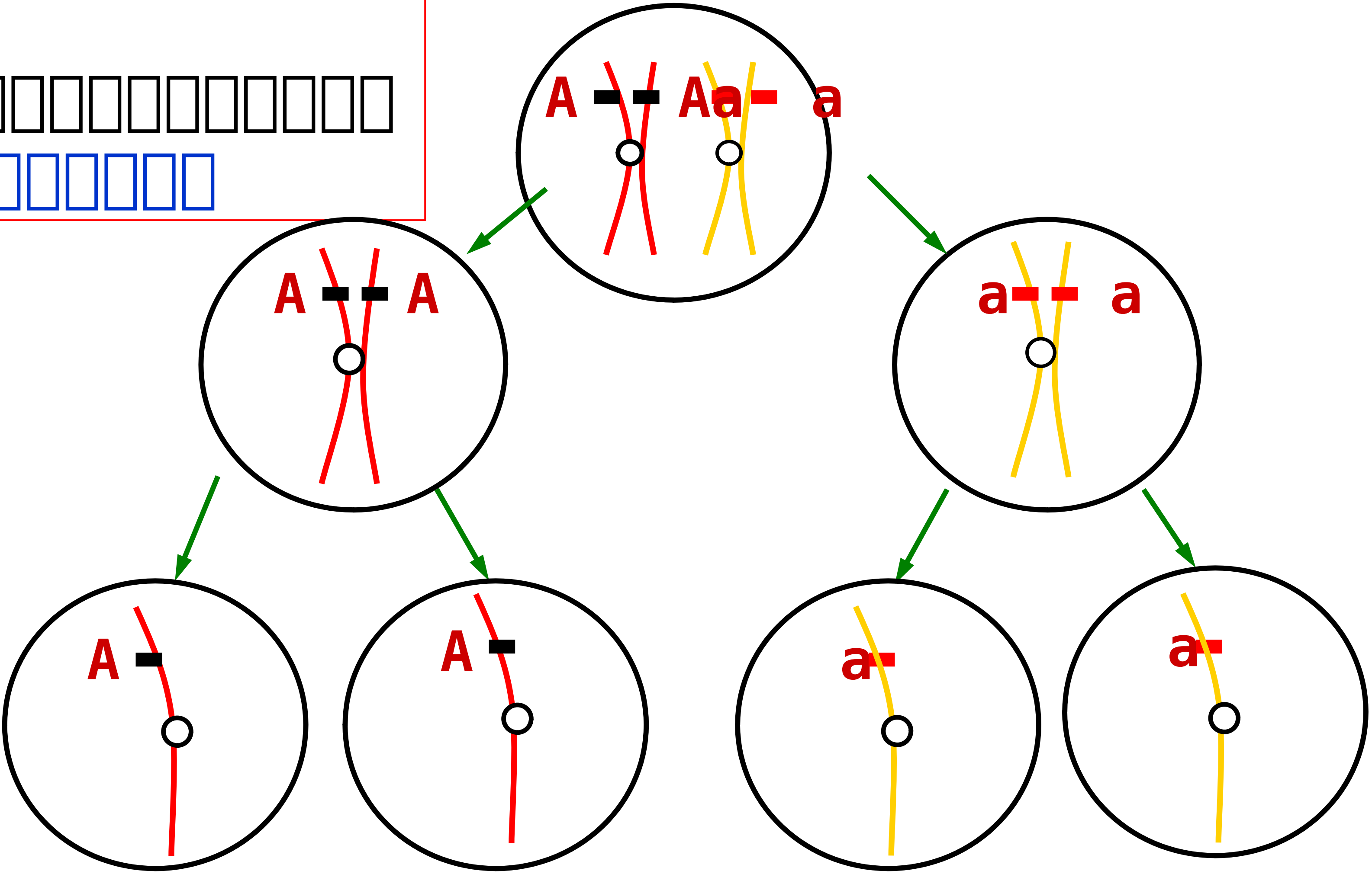
B.F1 [illegible]

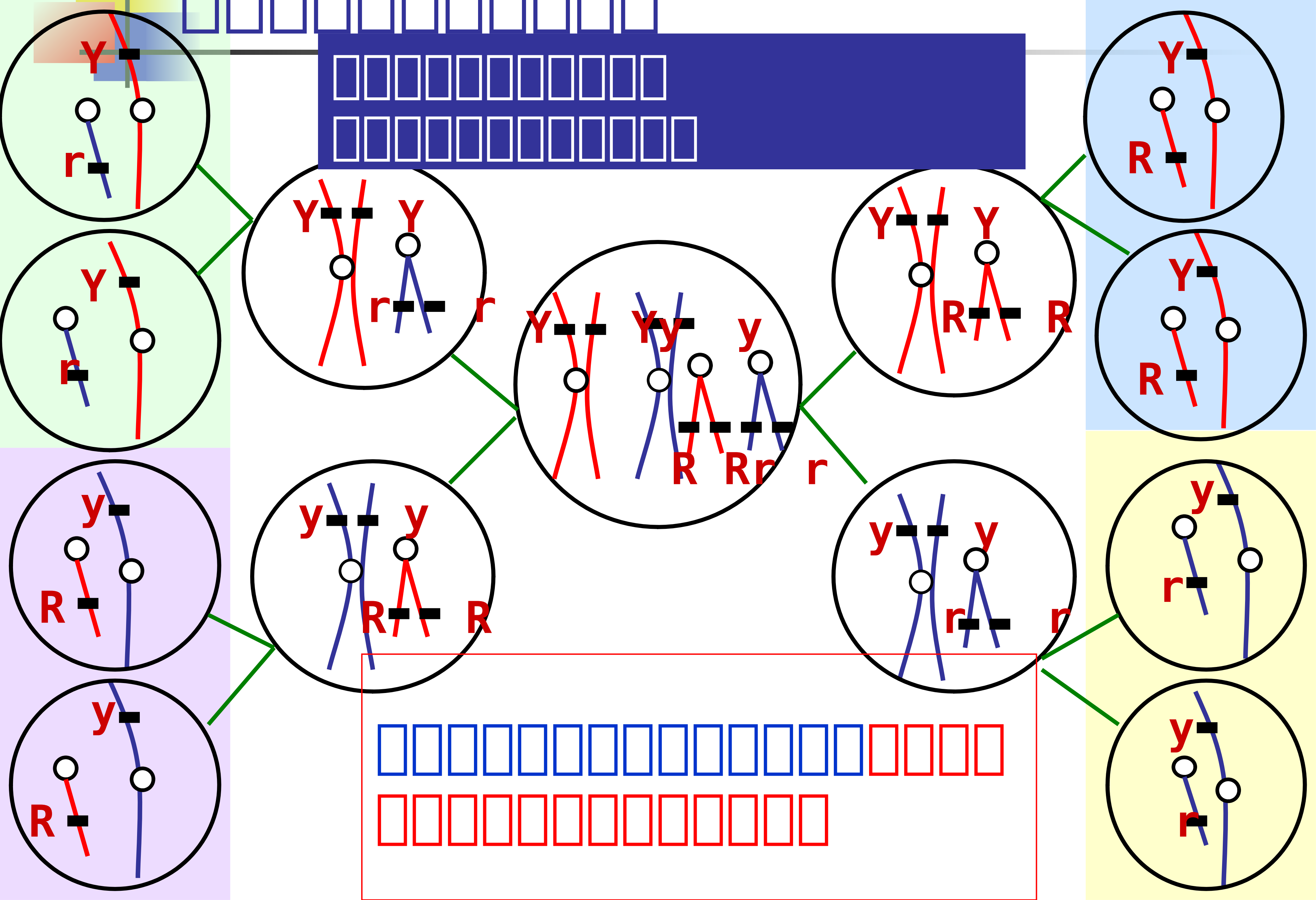
C.F1 [illegible] 1 [illegible] 1

D. [illegible]

[illegible]

[illegible]


A A a a
A A
a a
A
A
a
a



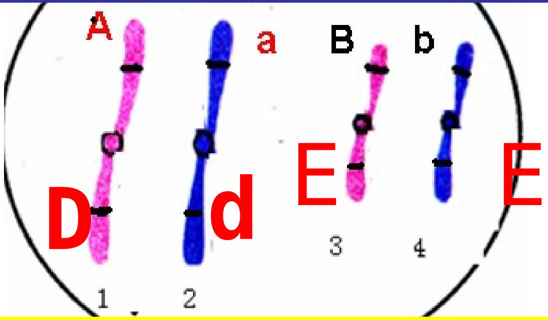
[illegible]

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]

[illegible] ad [illegible] AD [illegible]

① [illegible]　　② [illegible]

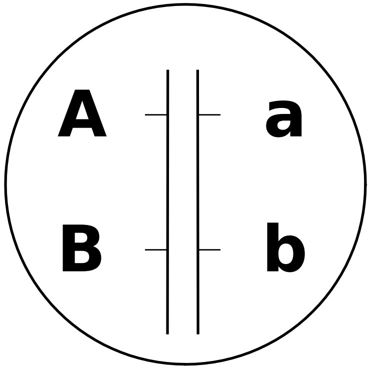
③ √ [illegible]　　④ [illegible]



[illegible] aD [illegible] Ad [illegible]

[illegible]

[illegible] AaBb [illegible]([illegible])[illegible]
[illegible]

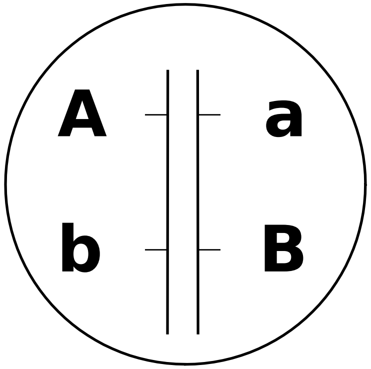


[illegible] AABB□AaBb□ aabb=1□2□1

A_B_□aabb=3:1

[illegible] AaBb□aabb=1□1

A_B_□aabb=1□1



[illegible] AAbb□AaBb□aaBB=1□2□1

A_bb□A_B_□aaB_=1□2□1

[illegible] Aabb□aaBb=1□1

A_bb□aaB_=1□1

[illegible]

[illegible] **9:3:3:1** [illegible]
[illegible] **1:1:1:1**

2. [illegible] × [illegible] × [illegible] X [illegible]

- ① [illegible] ________ [illegible]
- [illegible] ________ [illegible]
- ② [illegible] ________ [illegible]
- [illegible] ________ [illegible]
- ③ [illegible] × [illegible]
- [illegible] ________ [illegible] × [illegible] ________ [illegible] X [illegible]
- ④ [illegible] × [illegible]
- ________ [illegible] × [illegible] ________ [illegible] X [illegible]

[illegible]